

CMS/LHC Update

All Experimenters Meeting

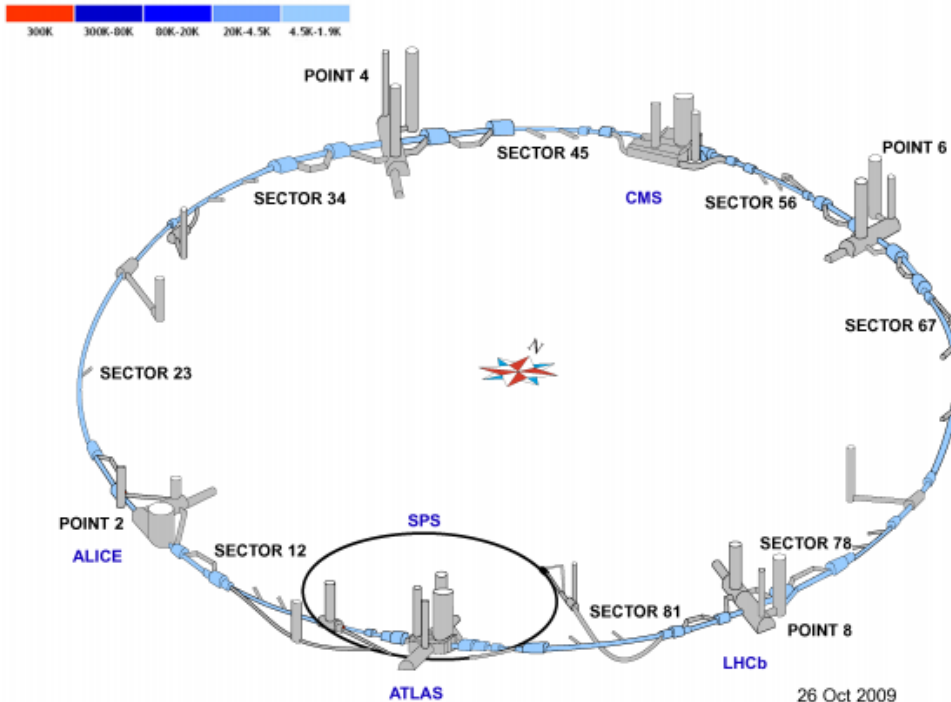
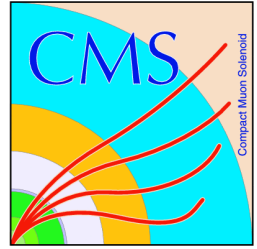
Jacob Anderson

Fermilab - CMS Center

Outline

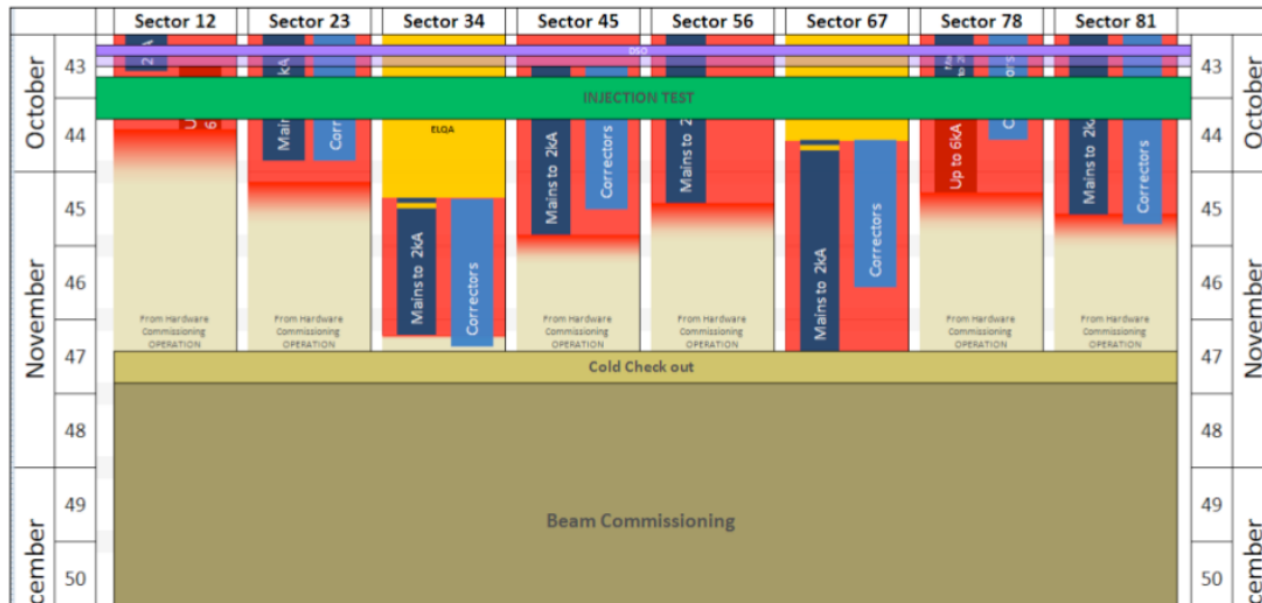
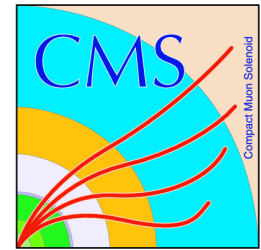
- LHC status
- CMS status

LHC status

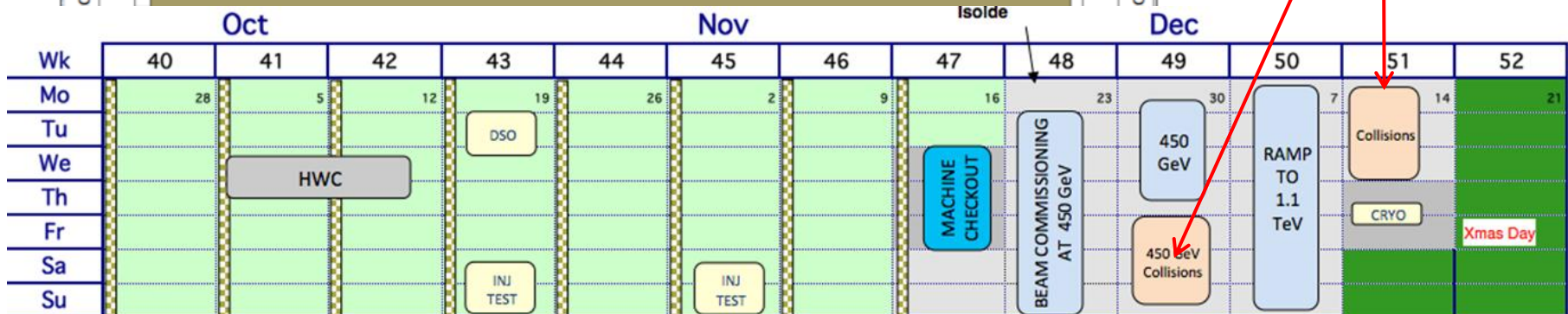


- The machine is cold.
- Successful injection tests in both directions over the weekend Oct. 23 through Alice to point 3 and through LHCb to point 7.
- Beam on collimator events expected in CMS during weekend Nov. 7 and 8.

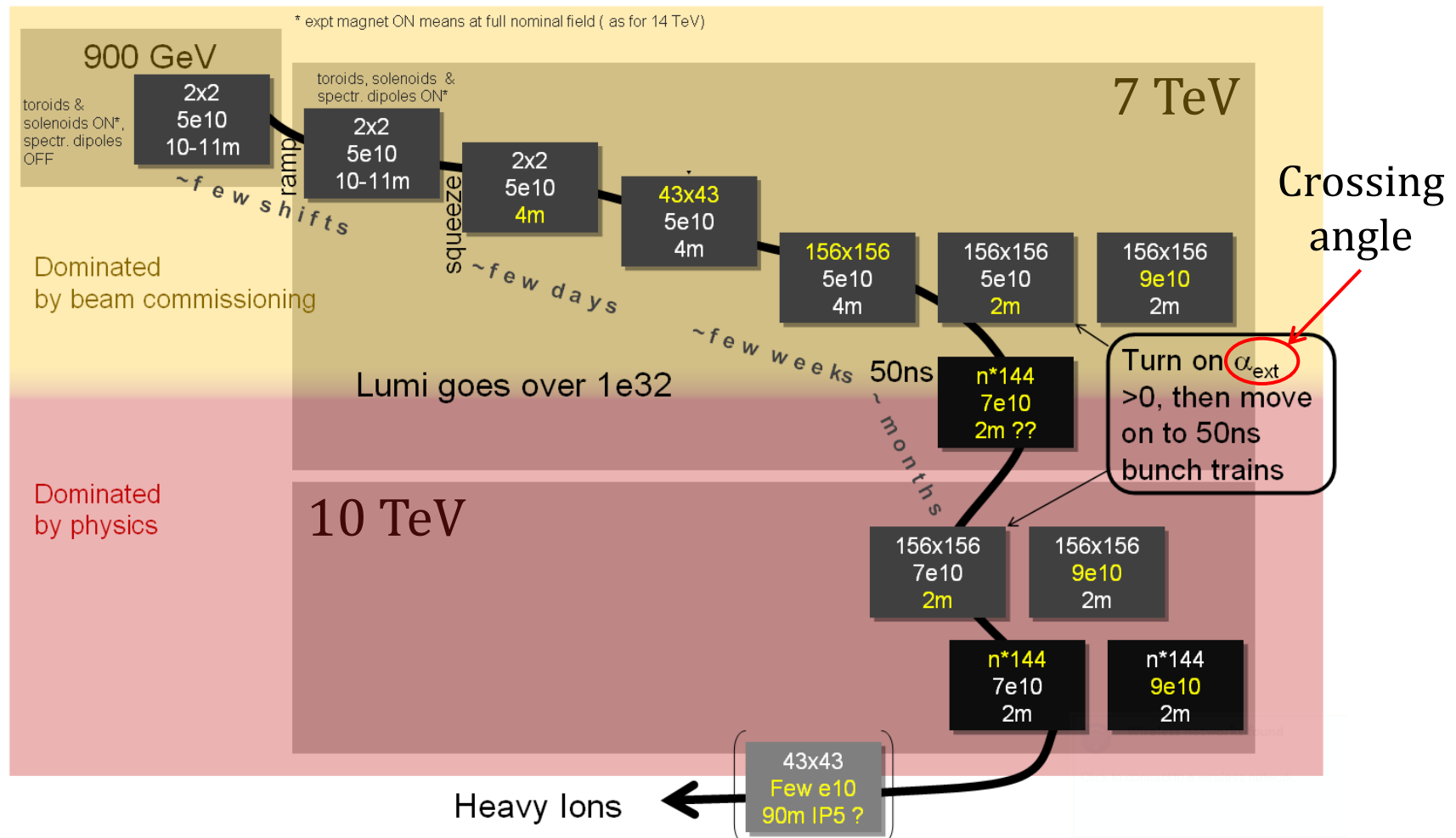
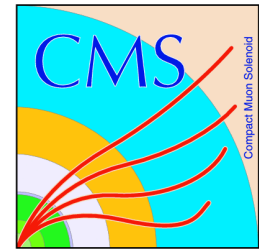
LHC status



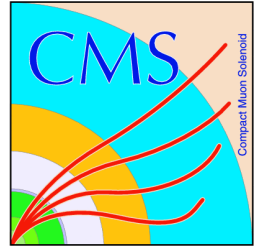
2 brief collision periods this year.



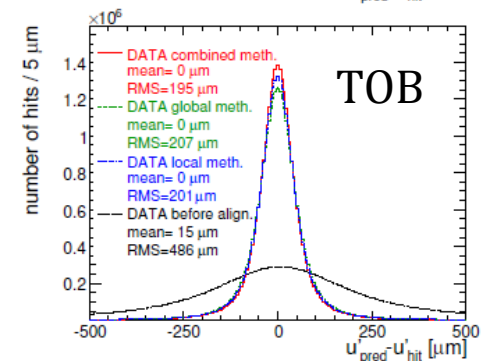
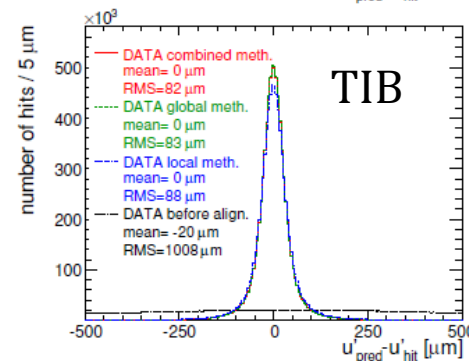
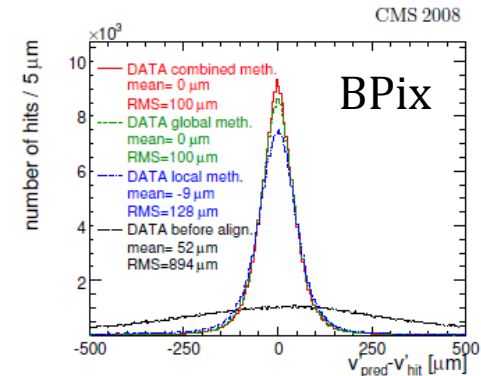
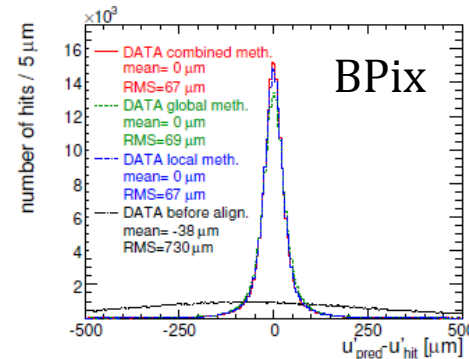
Grand plan for LHC operation



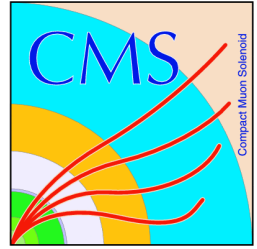
CMS activities



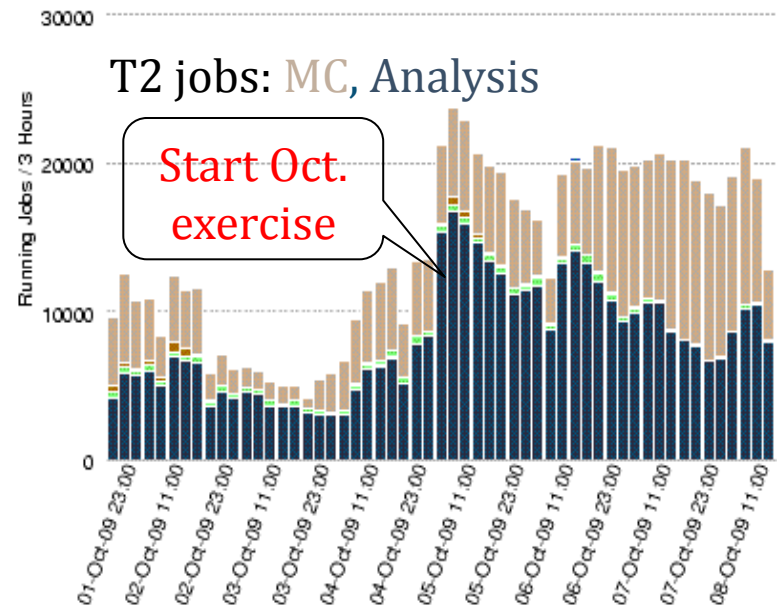
- Using the new cosmic data
 - detector alignment
 - detector performance
- Other activities
 - Cooling tower maintenance
 - Data transfer and analysis exercises
 - Final preparations



CMS October exercise



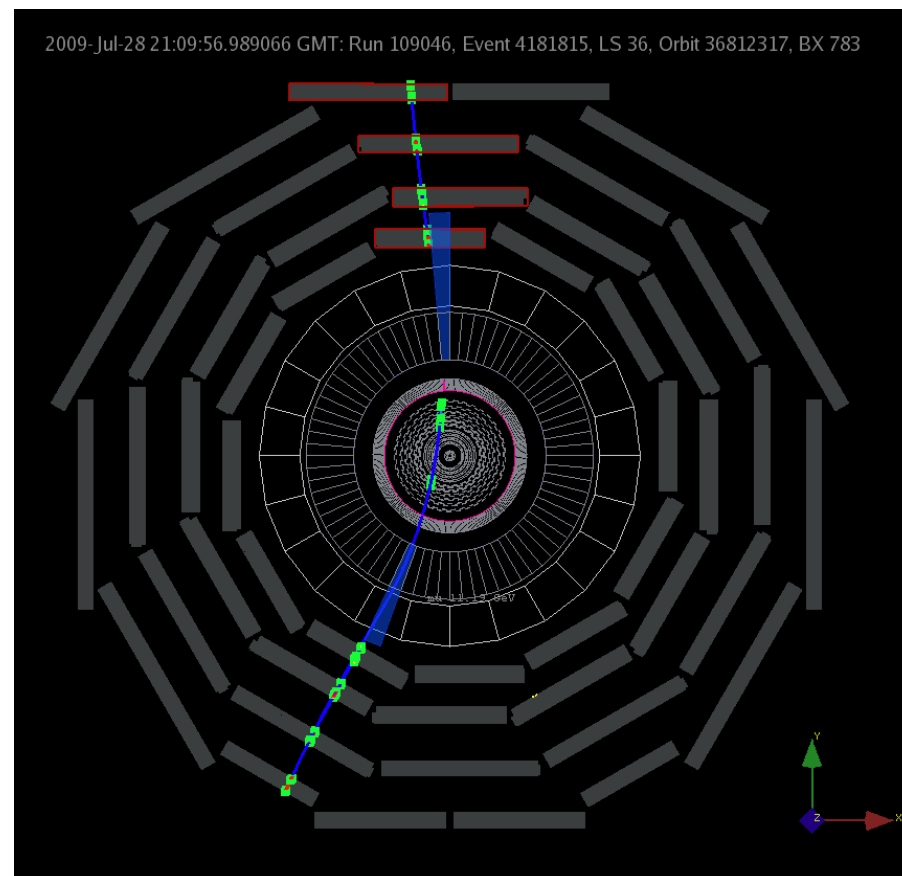
- Test the CMS computing and data models as realistically as possible.
 - Skim MC to make datasets to distribute to Tier 2 sites.
 - Test calibration and analysis workflows.
 - Stress test grid job submission and data transfer.
- Started out with a few hiccups, but they were quickly resolved and the test was overall a success.



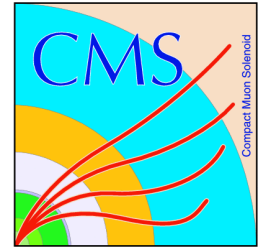
CMS status



- CMS has completed a long cosmic data taking run.
 - over 300M cosmic triggers.
 - sustained high trigger rates.
 - sustained 24 x 7 operation.
- **CMS is closed, powered, and subsystems are ready for beam.**



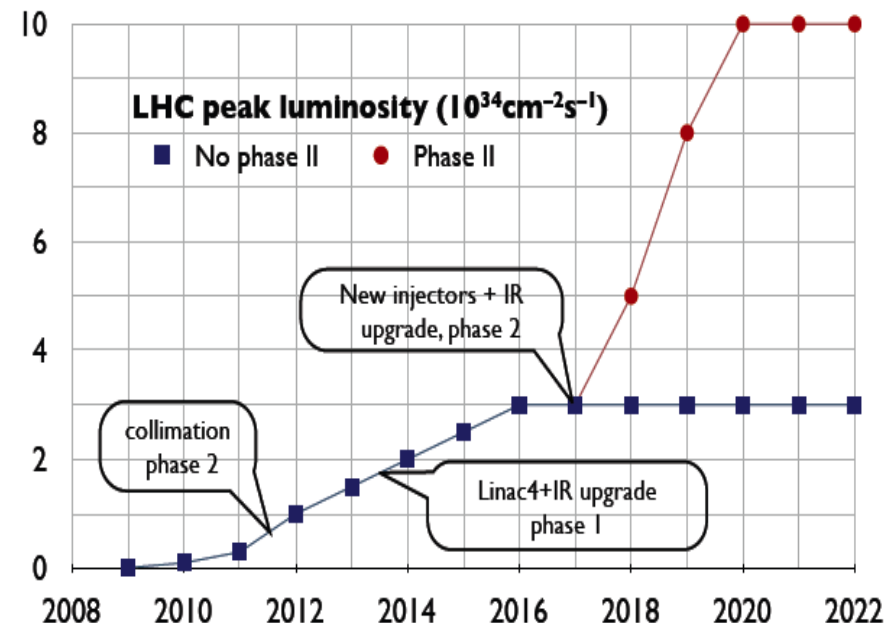
CMS is looking forward



- CMS is looking forward to beginning collisions, but also what the future holds.
- Last week there was an upgrade workshop here at Fermilab.
- At design luminosity of 10^{34} , the detector is good. Upgrade goes to 10^{35} .
- Upgrade development is already underway.

- Upgrades planned in:

- Calorimetry
- Tracking
- Trigger
- Muons



Bring On the
Beam!